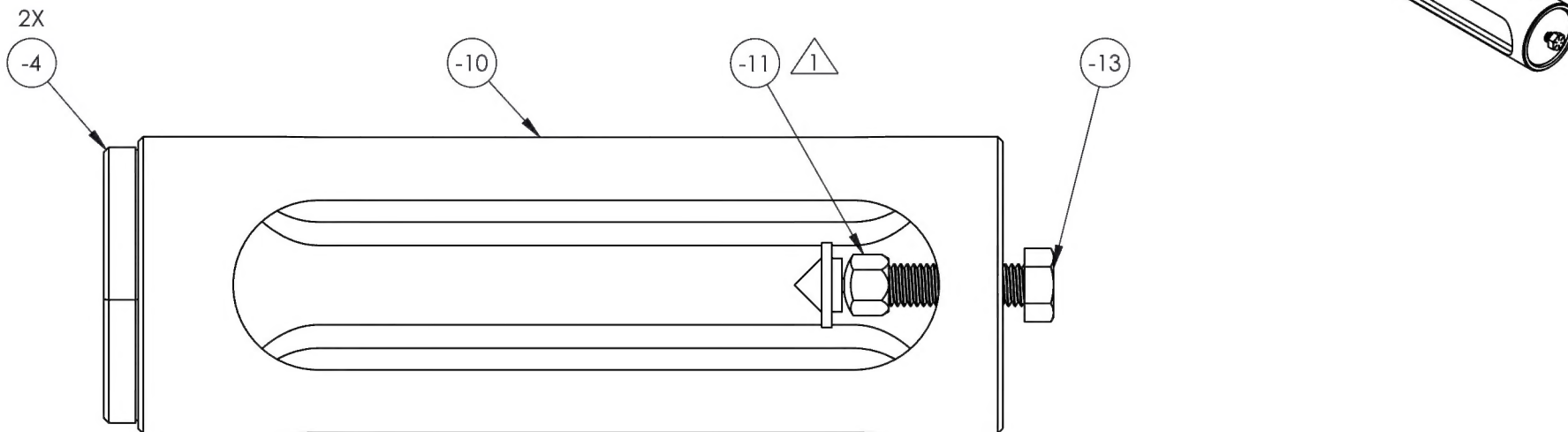


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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
A		CH'D TITLEBLOCK & REVISION BLOCK. -4, -5, -9 ADDED DRAWINGS. DELETED -3 UNIT REQUIRES 2 EACH -4'S.	6/8/2009	RJC	RW
1		CH'D TITLE TO PULLER-993L07X3E BEARING. -4 CH'D SPECIFICATIONS TO Ø4 X 8 (MAKES 6 SETS). ADDED MANUFACTURING STEPS. -5 CH'D MATERIEL TO DOM Ø3-1/2 X 1/4 WALL. ADDED SECTION A-A. ADDED MISSING DIM'S 1.12 & .75	5/26/2010	RJC	
1A		-5 ADDED DEPTH .880 TO THREAD CALLOUT.	1/21/2011	RJC	RW
2	15-0341	-4 CH'D MATERIAL WAS 4140 IS 4140/4142, CHANGED DIM WAS .060 THREAD RELIEF TYP. IS MIN. THREAD RELIEF. -5 ADDED DIM'S Ø3.050 +.005-.000 AND .625, MOVED 3 SLOTS AND 3-1/4-12 UN THREADS TO -10. -7 CH'D MATERIAL WAS 41L40 OR 4140 IS 4140/4142. -9 CH'D MATERIAL WAS 4620 IS 1018/1020. CH'D DIM WAS (Ø3.00) IS Ø3.050 +.000-.005, ADDED DIM 2X .06X45°. -10 & -11 ADDED WELDMENT DRAWING.	10/28/2015	RJC	JAG



NOTE:

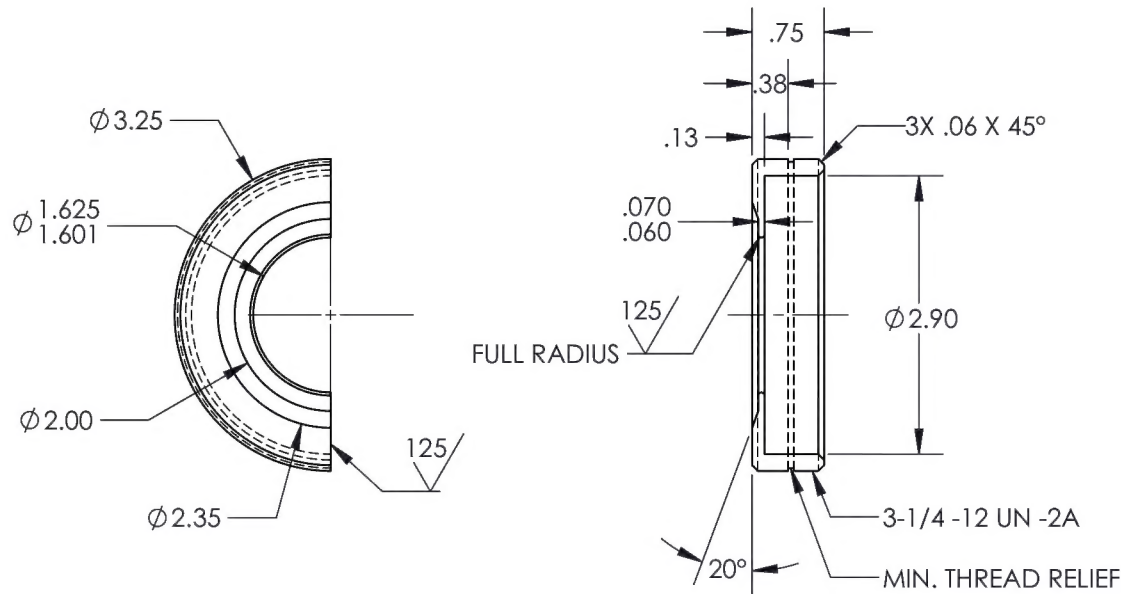
1 LOCTITE-11 ONTO -13.

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-4	2	JAW	4140/4142		2
	1		-5		TUBE	DOM		3
1			-7		PAD	4140/4142		4
	1		-9		PLATE	1018/1020		5
	X		-10	1	TUBE WELDMENT			6
X			-11	1	SWIVEL NUT	STEEL	12-13 UNC -2B CARR LANE #CL-8-SN MODIFIED	7
		B/O	-13	1	HEX HEAD CAP SCREW	S.S.	1/2-13 UNC -2A X 2 (MCMMASTER-CARR #92240A720)	1
ASSY -11	ASSY -10							

DART AEROSPACE	
TITLE PULLER-993L07X3E BEARING	
DWG NO. 269T9239	REV 2
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1	DRAWN BY: CLOUGH APPROVED D Weil HEAT TREAT FINISH SPEC USED ON MODEL
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 6/11/2009
SHEET 1 OF 7	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
A		-4 ADDED DRAWING. DELETED -3 UNIT REQUIRES 2 EACH -4'S.	6/8/2009	RJC	RW
1		-4 CH'D SPECIFICATIONS TO Ø4 X 8 (MAKES 6 SETS). ADDED MANUFACTURING STEPS	5/26/2010	RJC	
2	15-0341	-4 CH'D MATERIAL WAS 4140 IS 4140/4142, CHANGED DIM WAS .060 THREAD RELIEF TYP. IS MIN. THREAD RELIEF.	10/28/2015	RJC	JAG



MANUFACTUREING STEPS:

1. SAW IN HALF Ø4 X 8 AND MILL SAW FACES TO 125/.
2. WELD MILLED SECTION ON BAR ABOUT 1-1/2 in. ON EACH SIDE.
3. TURN TO CLEAN-UP ONE END FOR CLAMPING AT CNC LATHE.
4. TURN TWO PARTS OFF FIRST END, THEN ROTATE & START SECOND END. THIS IS TO AVOID LITTLE CLAMPING AT OPPOSITE END TO ENSURE GOOD GRIP AT SECOND SIDE. "AVOID RUNNING ONE END COMPLETELY".
5. COMPLETE MACHINING PART TO FINAL DIMENSIONS.

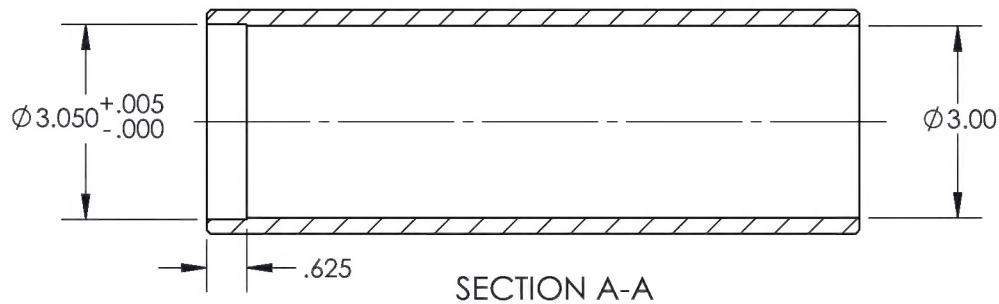
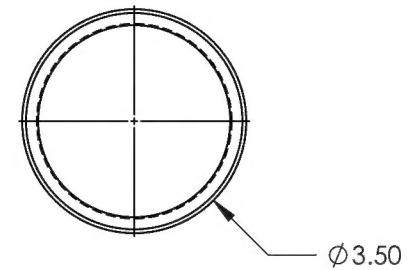
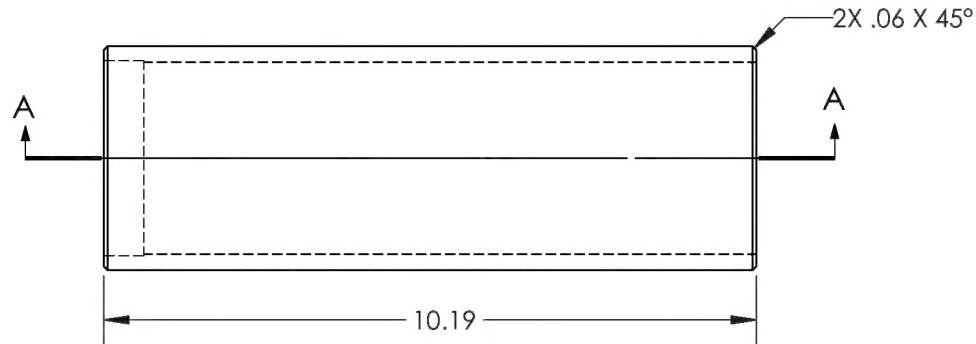
(-4)

JAW

DART AEROSPACE	
TITLE PULLER-993L07X3E BEARING	
DWG NO. 269T9239-4	REV 2
MAT'L 4140/4142	DRAWN BY: CLOUGH
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT TREAT RC 32-36
.XX ± .01 ANGLES ± 5°	FINISH BLACK OXIDE
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 6/11/2009
SHEET 2 OF 7	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
A		-5 ADDED DRAWING.	6/8/2009	RJC	RW
1		-5 CH'D MATERIEL TO DOM Ø3-1/2 X 1/4 WALL, ADDED SECTION A-A, ADDED MISSING DIM'S 1.12 & .75	5/26/2010	RJC	
1A		-5 ADDED DEPTH .880 TO THREAD CALLOUT.	1/21/2011	RJC	RW
2	15-0341	-5 ADDED DIM,S Ø3.050 +.005-.000 AND .625, MOVED 3 SLOTS AND 3-1/4-12 UN THREADS TO -10.	10/28/2015	RJC	JAG

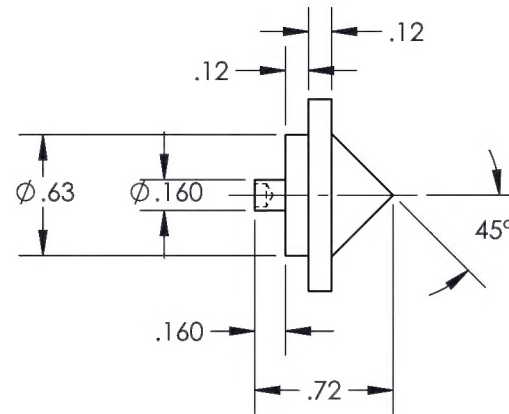
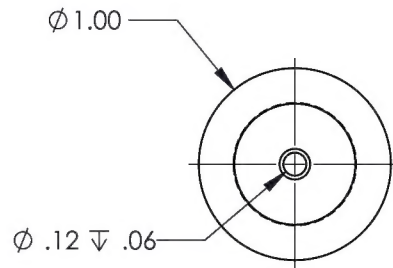
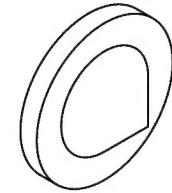


(-5)
TUBE

DART AEROSPACE	
TITLE PULLER-993L07X3E BEARING	
DWG NO. 269T9239-5	REV 2
MAT'L DOM UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	DRAWN BY: CLOUGH
.XXX ± .005 FRACTIONS ± 1/8	APPROVED <i>D Weil</i>
.XX ± .01 ANGLES ± 5°	HEAT TREAT
.X ± .1	FINISH SEE -10
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:3	DATE 6/11/2009
SHEET 3 OF 7	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0341	-7 CH'D MATERIAL WAS 41L40 OR 4140 IS 4140/4142.	10/28/2015	RJC	JAG



(-7)

PAD

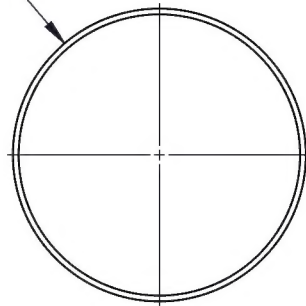
DART AEROSPACE	
TITLE PULLER-993L07X3E BEARING	
DWG NO. 269T9239-7	REV 2
MAT'L 4140/4142	DRAWN BY: COLE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT TREAT
.XX ± .01 ANGLES ± 5°	FINISH BLACK OXIDE
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:1	DATE 8/19/2003
SHEET 4 OF 7	

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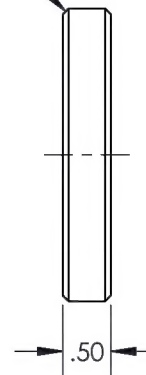
REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
A		-9 ADDED DRAWING.	6/8/2009	RJC	RW
2	15-0341	-9 CH'D MATERIAL WAS 4620 IS 1018/1020, CH'D DIM WAS (Ø3.00) IS Ø3.050 +.000-.005, ADDED DIM 2X .06X45°.	10/28/2015	RJC	JAG



Ø 3.050^{+.000}_{-.005}



2X .06 X 45°



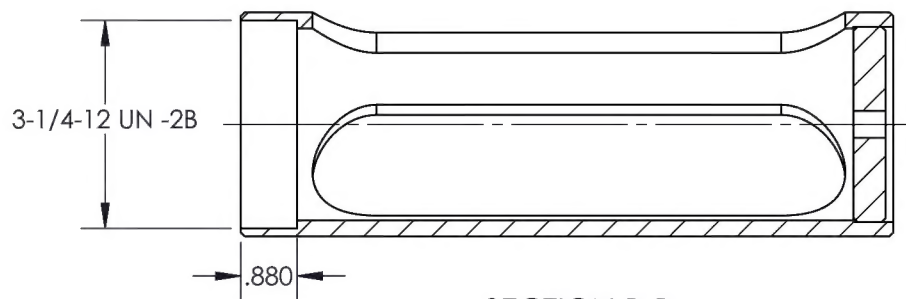
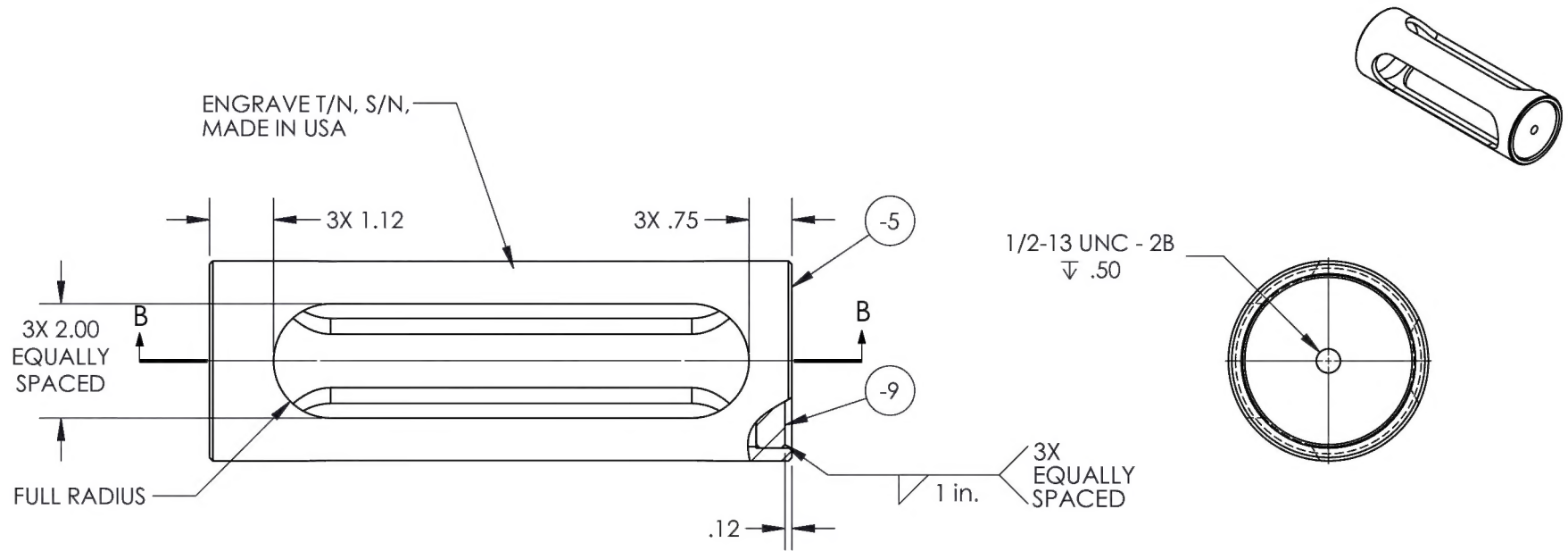
.50

(-9)
PLATE

DART AEROSPACE	
TITLE PULLER-993L07X3E BEARING	
DWG NO. 269T9239-9	REV 2
MAT'L 1018/1020	DRAWN BY: COLE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT TREAT
.XX ± .01 ANGLES ± 5°	FINISH SEE -10
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 8/19/2003
SHEET 5 OF 7	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0341	-10 ADDED WELDMENT DRAWING,	10/28/2015	RJC	JAG



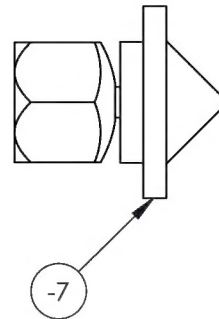
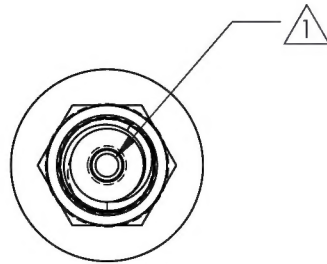
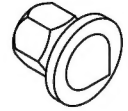
SECTION B-B

(-10)
TUBE WELDMENT

DART AEROSPACE	
TITLE PULLER-993L07X3E BEARING	
DWG NO. 269T9239-10	REV 2
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1	DRAWN BY: CLOUGH APPROVED <i>J Gilbert</i> HEAT TREAT FINISH BLACK OXIDE SPEC USED ON MODEL
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:3	DATE 10/27/2015
SHEET 6 OF 7	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0341	-11 ADDED DRAWING.	10/28/2015	RJC	JAG



NOTE:

1 REMOVE SWIVEL FOOT FROM CARR LANE
#CL-8-SN AND PEEN -7 TO THE SWIVEL NUT.

(-11)

SWIVEL NUT

DART AEROSPACE	
TITLE PULLER-993L07X3E BEARING	
DWG NO. 269T9239-11	REV 2
MAT'L STEEL	DRAWN BY: CLOUGH
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>J Gilbert</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT
.XX ± .01 ANGLES ± 5°	TREAT
.X ± .1	FINISH
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:1	DATE 10/28/2015
SHEET 7 OF 7	